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 UNITED STATES
 Environmental Protection
 Agency

Office Of Public Affairs
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Illinois, Indiana
 Michigan, Minnesota
 Wisconsin, Ohio

Proposed Plan for Cleanup of the Master Metals, Inc. Site

U.S. EPA Wants to Hear From You

U.S. EPA wants to hear from you about our plans for this Site. A 30-day Public Comment Period will run from December 15, 2001, through January 13, 2002. Your written comments are welcome and appreciated. Inside this fact sheet is a form to fill in and mail, e-mail, or fax to us. Your comments will be considered in choosing the final clean-up option.

If sufficient interest is shown, a public meeting will be scheduled. The meeting would be held in the vicinity of the Site on East Nevada Street, Detroit, Michigan. A minimum of ten written requests must be received in order to schedule a meeting.

This meeting, if held, would include a formal presentation of the materials contained in this fact sheet as well as in the Site Information Repository, including:

- Site history
- Site conditions
- Location and type of site contamination
- Potential for people and the environment to come in contact with the site contaminants
- Possible health risks to people and the environment
- Clean-up alternatives, including their costs, potential effectiveness, and implementability.

Detroit, Michigan

December 2001

Introduction

This Proposed Plan announces the U.S. Environmental Protection Agency's (U.S. EPA's) recommended clean-up for the Master Metals site in Detroit, Michigan. It describes the plan and discusses why U.S. EPA is recommending it.

U.S. EPA invites public input on the clean-up recommendation. Public input is important to the clean-up process. Based on information obtained through public comments, U.S. EPA may modify its recommended plan or select another from the alternatives listed on page two.

In considering U.S. EPA's recommended clean-up plan, the public may wish to refer to a site investigation report, which was completed and is summarized in this Proposed Plan. This report, called an Engineering Evaluation/Cost Analysis (EE/CA)¹, described, analyzed and compared a number of cleanup alternatives for addressing the lead contaminated soil at the Master Metals site. The report is available in the main Detroit Public Library.

Background

The Master Metals Site is located at 470-4740 East Nevada Street, Detroit, Michigan. Industrial operations at the facility included lead smelting between 1955 and 1983. The facility operated under the names of Consolidated Smelting Corporation, Electric Auto-Lite Company, Eltra (Prestolite) Corporation, Master Metals, Inc., Industrial Smelting Company, and Industrial Smelting Company & Galena Industries. Records indicate that the lead smelting process utilized natural gas and fuel oil (requiring storage) as sources of heat for smelting. The materials listed in the lead smelting process included: battery plates, drosses, iron, cable lead, pig lead, and battery lugs. In addition, records indicate Synergy Production Group also submitted plans to the Wayne County Air pollution Control Division (WCAPCD) for a tin smelting operation and a solder extrusion press.

In June 1998, Region 5 of the United States Environmental Protection Agency (EPA) issued an Administrative Order by Consent (AOC) to certain Respondents whereby the Respondents agreed to implement response actions at the Master Metals, Inc. Site. The AOC was issued in response to earlier EPA investigative results indicating that various Site materials and soils contained the hazardous substances, lead, and to a lesser extent, cadmium, arsenic, and asbestos, at concentrations above acceptable levels.

The AOC required the performance of two defined actions. The first was the performance of a Time Critical Removal (TCR) to abate an imminent and substantial endangerment to the public health, welfare or the environment that may be presented by the actual or threatened release of hazardous substances at or from the Site.

¹Section 300.415 (b)(4)(I) of the National Oil and Hazardous Substances Pollution Plan (NCP) and Section 113 (k)(2) of CERCLA require publication of a notice describing U.S. EPA's recommended alternative. The EE/CA must also be made available to the public for comment. This Proposed Plan is a summary of information contained in the EE/CA for the Master Metals, Inc. Site. Please consult the EE/CA for more detailed information.

The first action was formally completed on August 11, 1999, which included:

- decontamination and removal of the smelter building, baghouses and smelter pots and decontamination of remaining site structures;
- excavation and removal of lead contaminated soil above 900 mg/kg where no surface concrete was present;
- removal of three underground storage tanks formerly containing petroleum-based fuels;

The second action was the performance of an Engineering Evaluation/Cost Analysis (EE/CA) at the Site to:

- Define the nature and extent of residual impacts at the Site;
- Assess the environmental risks presented by current Site conditions, and,
- Determine if any additional cleanup actions beyond that already taken are necessary to ensure long term environmental and human protectiveness.

Engineering Evaluation/Cost Analysis Activities (EE/CA)

An Engineering Evaluation/Cost analysis or EE/CA is a document prepared to help decision makers better understand site contamination and clean-up needs. Specifically, the EE/CA documents:

- History of site operations resulting in contamination
- Site conditions such as hydrogeology (underground water flow and other information), topography (physical above ground soil and ground features), and plant and animal life
- Location and type of contamination
- Potential for people and the environment to come into contact with site chemicals
- Possible health risks to people and the environment
- Clean-up alternatives, including their costs, potential effectiveness, and implementability

Clean-up Alternatives Considered at the Master Metals Site

The EE/CA investigation included the collection of soil, groundwater and surface concrete samples to delineate the extent of off-site and remaining on-site impacts of lead as the primary contaminant of concern. Lead results of samples taken off-site were below lead concentrations in the background sample, and thus off-site response action is not planned at this time.

Based on data generated during the EE/CA field investigation, residual soil lead contamination remains in the southeast corner of the Site and in areas of deteriorated concrete across the Site. A risk assessment was conducted, which considered an industrial future land use for the site. The risk assessment established a site-specific lead risk-based removal goal

(RBRG) of 1135 mg/kg lead. The EE/CA identified and analyzed three removal action alternatives that address the southeast corner and deteriorated concrete at the site, areas with lead levels above the RBRG.

These alternatives are:

Alternative 1 - No Action

The No Action alternative provides a baseline for comparing costs and benefits of performing any additional removal action. No additional removal activity would be performed under the No Action alternative. The Site would be secured using existing perimeter fencing to prevent trespass. Signage prohibiting trespass would be posted at regular intervals along the fence line. Institutional controls, in the form of deed restrictions prohibiting soil excavation in the affected areas, are also part of this alternative.

Alternative 2 - Southeast Corner capping (covering), Deteriorated Concrete capping

This capping alternative would include the placement of six inches of poured concrete in the currently unpaved Southeast Corner area, and the areas of deteriorated concrete present across the Site that exceed the RBRG. A cement cap is the preferred engineered barrier as it is most protective over the long-term and will require less maintenance than a cap constructed of soil or asphalt. This alternative would also include restrictions on the future use of the land, such as construction and soil excavation, by imposing restrictive covenants. Annual inspection and repair of the capped areas would be performed for thirty years following completion of the final removal action as part of the operation and maintenance (O&M) for this alternative.

Alternative 3 - Southeast Corner excavation, treatment and consolidation, deteriorated concrete capping

Impacted soils from the Southeast Corner Area would be excavated under this alternative. Excavated soils would be treated as necessary to non-hazardous levels and consolidated on-Site. The treated, consolidated soils would then be capped with concrete. The Southeast Corner area would be backfilled to grade with crushed concrete from an off-site source. A six-inch concrete cap would be placed on the areas of deteriorated concrete where residual soil lead concentrations exceed RBRG.

Restrictions on future use of the property (using restrictive covenants) would be placed on areas of deteriorated concrete to prevent the potential for construction worker exposure to impacted soils. No institutional controls would be placed on the Southeast Corner Area of excavated soils. Annual inspection and repairs of the capped areas would be performed for thirty years following completion of the final removal action as part of the O & M for this alternative.

Alternative 4 - Excavation, treatment, and off-site disposal

Impacted soils from the southeast corner of the Site would be excavated. All on-site concrete would be removed. Areas of

excavated. All excavated soils would be treated as necessary on-site disposed of off-site as non-hazardous waste. The excavated areas would be graded and seeded. The existing on-site structures (quonset hut and office/warehouse building) would not be demolished.

Recommended Clean-up Alternative

The recommended additional removal action determined following the EE/CA is **Alternative 2**. This alternative would involve the capping of impacted soils in the unpaved Southeast Corner Area and the capping of impacted soils which exist beneath segments of deteriorated concrete.

Restrictions on future land use (such as restrictive covenants that run with the land) shall be placed on both properties to eliminate the potential for worker exposure to soil ingestion and/or inhalation.

This alternative would effectively preclude environmental and human exposure to the remaining residual lead-impacted soils currently present at the Site by eliminating the lead exposure pathway. The alternative is effective over the long-term and there is minimal short-term risk to workers implementing the remedy because the impacted soils will not be excavated, thereby eliminating exposure via fugitive dust emissions. This remedy can be readily implemented using proven encapsulation technologies in a most cost-effective manner.

Evaluation Criteria

U.S. EPA typically uses specific criteria to compare the clean-up alternatives in an EE/CA and to recommend the most favorable clean-up remedy. The evaluation criteria consists of:

Overall Protection of Human Health and the Environment. This criterion assesses the overall protection afforded by each alternative, considering long-term effectiveness and permanence, short-term effectiveness. And compliance with Applicable or Relevant and Appropriate Regulations (ARARs). Protection of human health is assessed by evaluating how Site risks from each exposure pathway are eliminated, reduced, or controlled through the specific alternative. This evaluation takes into account short-term and cross-media impacts that may result from cleanup activity.

Long-Term Effectiveness and Permanence. The focus of evaluating long-term effectiveness and permanence is to determine the extent and effectiveness of each alternative with respect to the risk remaining at the Site after the clean-up action is implemented. Components of this criterion include the magnitude of residual risk from the alternative; the likelihood that the alternative will meet process efficiencies and performance specifications; and the adequacy and

reliability of long-term monitoring controls providing continued protection from residual impacts.

Compliance with ARARs. The clean-up alternative must be in compliance with ARARs. Detailed ARARs can be found on page 3-1 of the EE/CA Report in the Site Information Repository.

Reduction of Toxicity, Mobility, or Volume Through Treatment. This analysis evaluates the quantity of contaminants treated and destroyed; the degree of reduction in contaminant toxicity, mobility, and volume; the degree to which treatment is irreversible; the type and quantity of residuals remaining; and how the principal threat is addressed through treatment.

Short-Term Effectiveness. The short-term effectiveness of each alternative is assessed based on the risk to the community, workers, and the environment associated with implementing the remedial action, and the time required to achieve the response objectives. Measures that can mitigate or compensate for this risk are a key issue in this determination.

Implementability. This criterion analyzes technical and administrative feasibility, availability of services and materials, and community and state acceptance. This includes assessing the difficulty of constructing or operating a particular alternative and the unknowns associated with a technology; coordinating all appropriate offices and agencies for the implementation of that alternative; and assessing whether all required materials and services will be available at the scheduled time the alternative is to be implemented. Important in the determination of implementability is the reliability of the technology based on the likelihood of technical problems that could lead to project delays.

Cost. The total cost of each alternative is based on the sum of the direct capital costs (materials, equipment, labor), indirect capital costs (engineering, construction, monitoring, and construction oversight), and the present worth of annual Operation and Maintenance costs.

The Next Step

U.S. EPA will evaluate public comments received during the public comment period before selecting a final clean-up plan. The final plan will be described in a document called an Action memo. U.S. EPA will respond to comments received in a document called a Responsiveness Summary which will be attached to the Action memo.



After the final clean-up plan is selected, U.S. EPA will meet with those parties responsible for the contamination and request that the clean-up be done

For More Information

U.S. EPA has established a file for public review called the information repository. The information repository contains general information about U.S. EPA's Superfund Clean-up program as well as documents related to the project, including the EE/CA. The repository is located at the main **Detroit Public Library** Sociology and Economics, 5201 Woodward Avenue, Detroit, MI 48202. (312) 833-1440.

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